

REMARKS

This Amendment is in response to the Office Action mailed on March 11, 2004. Claims 1 and 8 have been amended. The amendments are editorially and add no new subject matter. In view of the above amendments and the following remarks, Applicants submit that the pending claims are in condition for allowance.

Objections

The specification was objected to for including acronyms that were not spelled out at their introduction. In response, the specification has been amended to spell out the acronyms when they are introduced.

The abstract was objected to for including more than one paragraph. In response, the abstract has been amended to include only one paragraph.

Claims 1-8 were objected to for including some unclear language. Claims 1 and 8 have been editorially amended to remove the unclear language and to further clarify the subject matter of the invention.

Rejections

Claim 1 was rejected under 35 U.S.C. 103(a) as being obvious over Shilling (U.S. 5,422,908). This rejection is traversed.

Claim 1 recites a radio frequency receiver for a code division multiple access mobile communication base station system that includes, among other things, an analog down-converted means for down-converting multi-frequency allocation radio frequency signals to intermediate frequencies and a digital down-converter means for converting the intermediate frequencies into in-phase and quadrature channels. In other words, the claimed receiver can in a single step convert RF signals to digital signals.

Shilling fails to disclose or suggest at least the above-recited features. In particular, Shilling fails to disclose or suggest a receiver having an analog down-converter means and a digital down-converter means as recited in claim 1. Instead, Shilling discloses converters 21, 22

for converting RF signals into IF signals and analog-to-digital converts 23, 24 to convert IF signals into digital signals. See Shilling at Figure 3, and at columns 4-5. Since the device disclosed in Shilling can only perform the conversions sequentially, claim 1 is not obvious.

Claim 1-4 and 8 were rejected under 35 U.S.C 103(a) as being unpatentable over Lee (U.S. 6,169,733). This rejection is traversed.

As discussed above, claim 1 recites a device that includes components that enable it to simultaneously convert the RF signals into digital signals. Claim 8 also recites a device capable of simultaneously convert the RF signals into digital signals. Like Shilling, Lee fails to disclose or suggest such a device. Instead, Lee discloses a multiple mode capable radio receiver device that converts a signal received from the antenna 11 down to a baseband signal and performs digitization only upon a single channel signal individually or one at a time. See Lee at Figure 1 and 2; and at column 3, line 53-column 4, line 12. Accordingly, claim 1 and 8 are not obvious. Claims 2-4 depend on and further limit claim 1, therefore, for at least the same reasons, they are also not obvious.

In view of the above amendments and remarks, Applicant respectfully requests a Notice of Allowance. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

Respectfully submitted,

MERCHANT & GOULD P.C.
P.O. Box 2903
Minneapolis, Minnesota 55402-0903
(612) 332-5300

Date: August 11, 2004



Curtis B. Hamre
Reg. No. 29,165
CBH/JEL/jt